

# Automated hiring platforms as mythmaking machines and their symbolic economy

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## Abstract

Automated hiring platforms offer critical Artificial Intelligence (AI) researchers a privileged site for the study of technological controversies and their unfolding as they often end up entangled in scandals. In 2019, an official complaint filed with the Federal Trade Commission (FTC) outlines the main controversy created by such systems, directly targeting HireVue's platform. According to the FTC, these systems "evaluate a job applicant's qualifications based upon their appearance by means of an opaque, proprietary algorithm" (FTC, 2019, p.1). Existing critical literature outlines how Basic Emotions theory (Ekman, 1999) and its deployment through an AI-powered system fuel ventures such as automated hiring platforms (Stark, 2018). Therein lies a form of opportunism where the use of available audiovisual data and the revalorization of heavily criticized and simplistic theories about the human mind create discriminatory automated decision-making grounded in bogus science (Crawford, 2021). Even if HireVue slightly modified its product by removing the video analysis component in reaction to the critiques formulated by regulatory bodies, the company kept AI-powered voice analysis, its one-sided video interview technique and the multitude of gaming assignments designed to evaluate candidates. Going beyond scandals and hype, this article aims to tackle the inevitable political economy generated by automated hiring systems. Indeed, job seekers are confronted with a system that disrupts a well-established, sociologically stable technique, the interview, and its technical object counterpart, the resume. We assert that the gaps of nonknowledge (Beer, 2023) created by the one-sided interviews break the commonly accepted interactionist framework that originally informed the hiring process. Using HireVue as a case study, we lay bare the political economy of AI-powered automated hiring platforms, highlighting how individuals assess their capacity to acquire agency in the face of opaque technologies.

Automated Hiring; HireVue; Reddit; Nonknowledge; Political Economy

## 1. Introduction

On January 1, 2020, the State of Illinois passed the Artificial Intelligence Video Interview Act (AIVI) which regulates the use of automated hiring platforms (AHPs) based on AI components. More specifically, section 5.2 of the act states that job applicants screened by such systems must be provided

with information “explaining how the artificial intelligence works and what general types of characteristics it uses”<sup>1</sup> in its evaluation before the interview. Since AHPs “typically use natural language processing (NLP), computer vision, or supervised machine learning techniques that claim to predict job performance” (Sloane et al., 2022, p.1), and that such systems are known for their opacity, the application of legislation such as the AIVI act will prove to be difficult. The controversial nature of volatile, black-boxed systems (Macospol, 2007; Venturini, 2010) extends well beyond their technical part to engulf a wide variety of social actors entangled in a mesh of relations taking the shape of conflicts, negotiations, and strategic interactions.

Of late, a specific AHP vendor piqued the interest of privacy advocate groups and became the subject of frequent coverage in the general press: HireVue (Crawford, 2021; Doctorow, 2021; Knight, 2021). The company’s product, an AI-powered platform aiming for the complete automation of the hiring process, came to be targeted by an official complaint filed to the Federal Trade Commission (FTC) by the Electronic Privacy Information Center (EPIC) in 2019. According to EPIC, these systems: “evaluate a job applicant’s qualifications based upon their appearance by means of an opaque, proprietary algorithm.” (FTC, 2019, p.1)<sup>2</sup>. The extended deployment of this specific platform,<sup>3</sup> following its enthusiastic promotion by HR consulting firms and counselors, created outcry amongst job applicants who flocked to online forums and fueled a public discussion about the effects of such technology. Reddit, precisely the r/recruitinghell subreddit,<sup>4</sup> has become a site of intense debate where users rant about their experience involving HireVue and, furthermore, discuss potential strategies that could be adopted to win the automated job-interview game, might they be technical hacks, *mise-en-scène* tricks or behavioral adaptation techniques.

The aim of this article is to investigate the symbolic economy created by AHPs and to contribute to the growing field of critical AI studies (Roberge & Castelle, 2021). When discussing the recursion at work in societies where AI-laced technologies have been deployed and operating for some time, David Beer claims it is “built upon feedback loops, multiple feedback loops, each endlessly feeding into the next” (Beer, 2022, p. 1). It is through the study of the controversiality of HireVue and its structuring effect on online communities that we identify a grounded example of these recursive social forms. To do so, we performed a cross analysis of HireVue’s corporate content with a non-participant observation of various online forums where the company’s AHP was discussed. The technological disruption of the hiring interview, a well-established gatekeeping social ritual, combined with the scarcity of contextual information resulting from the opacity of the AHP, creates an environmental pressure that shapes job applicants’ online communities. Beyond the despair and angst expressed on Reddit, our research led us to witness the emergence of a symbolic economy situated around the black box, where job applicants would trade dubious knowledge concerning the AHP in the hope of fostering agency amongst the community or on a personal level. By studying online exchanges on forums and corporate communications, we observed that pressure exerted by a specific sociotechnical system, HireVue’s AHP, over a vastly distributed human group, the job applicants, has a structuring effect on their loosely coordinated online community. These communities spontaneously form and their members engage to correct the knowledge gaps situated at the root of the disruption caused by the AHP in the social ritual of interviews. We can witness within online forums that the applicants as well as HR experts participate in a parallel economy where the exchanged currency is constituted of dubious information, hoping to acquire agency against a faceless gatekeeper managing the social selection process. Looped around

<sup>1</sup> State of Illinois, Public Act 101-0260, 2020. <https://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=101-0260>

<sup>2</sup> <https://epic.org/documents/in-re-hirevue/>

<sup>3</sup> Boeing, GE, Unilever, Deloitte, PwC, Mercedes-Benz, Kraft Heinz, Delta, Hilton and St. Jude Children’s Research Hospital, amongst many others.

<sup>4</sup> In the context of our data collection, of the 132 Reddit posts mentioning HireVue, 109 were located in the r/recruitinghell subreddit.

a technological object, social actors engage in trade and circulate, changing roles as their status morph within this circuit.

## 2. AHPs & critical AI studies

Our study of AHPs began with a review of some of the existing literature from the broad field of critical AI studies which “trains itself on the entire sociotechnical and political process of modern machine learning from genesis to impact and back again” (Roberge & Castelle, 2021, p. 3), focusing on the deployment of automated hiring platforms. Our first assessment showed that the subject of automated hiring was already treated in corpuses concerned with bias making by algorithmic systems rooted in junk science. Scholars such as Luke Stark, Mona Sloane, Jevan Hutson, Kate Crawford have all contributed to this body of literature, notably by demonstrating how automated hiring, which often mobilizes facial recognition (FRT) and voice recognition technologies (VRT), reactivated old debunked pseudo-sciences such as physiognomy and phrenology (Stark & Hutson, 2021; Crawford, 2021; Sloane et al., 2022). The epistemological roots of the psycho-computational complex (Stark, 2020) can be found in the work of 19th century British scientist Sir Frances Galton and still rely heavily on the use of visual cues tied to bodily signs (Stark, 2018). To support the wild claim “that they reveal the true potential of job candidates” (Sloane et al., 2022, p. 1), current AHP systems pair up FRT to a truncated understanding of Basic Emotion Theory (BET). According to Stark, this clunky assemblage does “not lend sufficient scientific evidence for even nuanced arguments grounded in the Motivational tradition,<sup>5</sup> much less the often sensationalist claims made by many FRT providers.” (Stark & Hoey, 2021, p. 790) While the recursion of pseudoscience is not uninteresting to us, we turned our attention to the question of power within and without AI systems, mainly the precise workings of how each system operates in its own private, autonomous, micro-political economy (Farrell & Fourcade, 2023). Rahman recently described opaque third-party algorithmic evaluations as constitutive elements of “‘post-panoptic’ environment for workers” which the author dubbed the invisible cage (2021, p. 949). Acting as an algorithmic evolution of the iron cage theorized by Weber, these environments trigger reactivity amongst workers as “they have difficulty identifying the evaluations’ underlying expectations, including what is rewarded or punished.” (Rahman, 2021, p. 977) Beyond stating they are resisting such evaluations through only platforms dedicated to knowledge sharing, where they can “help each other learn new systems and practices” (Kellogs et al., 2020, p. 392), we wondered how such knowledge exchanges would be organized.

By shifting our focus from the study of “algorithmic harm” and “algorithmic resistance,” two already explored approaches described above, to the study of an AI-enabled symbolic political economy, we aim to sketch out the understanding of how a multitude of systems, operating in their own realms while potentially overlapping, reconfigures our societies through recursive mechanisms. This article is aligned with the approaches of scholars that examine the reconfiguration of power relations by AI, such as Farrell and Fourcade’s work on the creation of private knowledge regimes by chatbots (Farrell & Fourcade, 2023), Beer’s theoretical writings on the social recursiveness emerging around AI systems (Beer, 2022; 2023) and, finally, the work of Roberge and affiliates such as McKelvey on the becoming of AIs black boxes opacity as a mode of governance which prompts a form of recursive power (Roberge & al., 2020; Roberge & McKelvey, 2023).

<sup>5</sup> BET is an offshoot of the Motivational psychological tradition in the study of affect. Its founder notoriously claimed that “the primary motivational system is the affective system.” (Tomkins, 2008, p.4) Paul Ekman subsequently developed BET claiming there exists six universal basic emotions which are tied to specific facial expressions. (Ekman, 1992)

### 3. Methodology

The methods we chose to study HireVue's AHP are highly inspired by the work of science and technology studies (STS) scholars such as sociologist Angèle Christin and anthropologist Nick Seaver regarding the challenges posed to social sciences by the opacity of the algorithmic black box, which often incarnates either corporate secrecy, mathematical complexity, or pure unexplainability when in the presence of neural net-based technologies (Christin, 2020; Seaver, 2017). For critical AI studies authors, the algorithmic opacity is not in itself a hurdle; the conjugation of classical social science methods and new digital methods, or computational science knowledge, can inform us on the inner workings of these technologies. As Seaver argues, algorithms and individuals mutually influence themselves, meaning that algorithms can be known through the ways they influence society (Seaver, 2017). Going further, Seaver urges social scientists to stop feeding into the "algorithmic drama" of the black box by redirecting their gaze to the social and material impacts of automated technologies (Seaver, 2022). This opens the perspective of studying automated technologies from the *exterior*, rather than fixating on the *interior* of the algorithmic black box. Social scientists can work with exterior materials such as interviews with individuals, computer science texts, mathematical models, corporate narratives, lab ethnography, financial reports and so on. This methodological approach is what Christin names the "algorithmic refraction," which she defines in the following way:

The concept of refraction is derived from physics, where it refers to the changes in direction and strength that occur whenever a wave of light or sound passes from one medium to the next. Applied to algorithms, studying refraction entails paying close attention to the changes that take place whenever algorithmic systems unfold in existing social contexts—when they are built, when they diffuse, and when they are used. (Christin, 2020, p. 906)

To gain "ethnographic insight into how job applicants experience AHPs" (Sloane et al., 2022, p.7), we decided to engage in non-participant observation on forums where individuals would express themselves on automated hiring, whether expressing concerns, criticizing the technology, or expressing how an AI-piloted interview made them feel, as well as individuals praising HireVue. We proceeded with the data collection<sup>6</sup> for this study in February 2023<sup>7</sup>, gathering online-available material, mainly testimonies from the Reddit subreddit dubbed *r/recruitinghell* from individuals who claimed they passed a HireVue interview<sup>8</sup>, but also videos posted on YouTube from individuals claiming to be human resources specialists<sup>9</sup> peddling and selling "counsels" and "advice" and even, in some cases, AI-powered technology for interview practice.

Following a "thick data" approach in order "to reduce the breadth of data (the number of datapoints) while enhancing their depth (i.e. 'thick-ness' of each datapoint)" (Latzko-Thot et al., 2022, p. 202), we developed a process to collect and categorize posts from Reddit. This specific platform was chosen since its "masked" commenters are "often discussing lengthy and detailed personal experiences, sometimes asking for help, support and information, and sometimes simply sharing their thoughts and opinions." (Adams, 2024, p. 48) The expression of negativity on this platform, bolstered by anonymity, could be revealing of the harm caused by HireVue's AHP. Multiple qualitative studies (Low et al., 2020; Slemon et al., 2021) powered by natural language processing (NLP) and enabled by the Pushshift dataset (Baumgartner et al., 2020) gave insights to the research communities about the expressive content available on the platform. As an example, studies focusing on eating disorders conducted on the same platform revealed that "feelings of frustration, anxiety and loneliness were shown to increase in presence within linguistic discussions by Reddit users." (Adams, 2024, p. 50) We concluded that harmful experience involving HireVue's AHP could be narrated in lengthy detail by Reddit users in a non-chastised manner, hence the choice of said platform for our inquiries.

<sup>6</sup> A digital archive was created from the collected textual content for further analysis.

<sup>7</sup> Publications on Reddit and YouTube mentioning HireVue were exhaustively collected at the date.

<sup>8</sup> Reddit: 139 posts amongst which 131 were located on the *r/recruitinghell* subreddit ; YouTube: 16 posts.

<sup>9</sup> YouTube: 16 posts.

The first phase of data collection was conducted by manually scraping content from Reddit using a simple search term: “HireVue”. We exhaustively recuperated all posts (139) where the term was occurring. Quite surprisingly, the vast majority of them (131, which corresponds to 94.25% of the whole) were located on the r/recruitinghell subreddit. The fact that this particular subreddit, being mainly dedicated to the shared misadventure narratives of job applicants, was already an indicator that its posts would feature “liberated voices” and would be in that sense quite critical of AHPs. Most posts located on other subreddits<sup>10</sup> were from job applicants asking about a future Hirevue interview for highly skilled positions (accountants and engineers) in international firms.

The second phase of data collection was aimed at the YouTube platform. Often used as marketing tools to advertise services, professional YouTube accounts could lead us to a type of content concerning HireVue that would differ from the disgruntled job applicant comments on Reddit, therefore acting as a counterpoint and adding depth to the object of study. The platform was selected as a site of inquiry as it is used by self-proclaimed experts to peddle some basic counseling as a kind of fishing practice to then sell more “profound” advice. In order to recuperate the so-called experts’ discourses on the platform, we used the following search terms: “HireVue”, “HireVue Experts”, “Tips for HireVue interview.” The collected discourses<sup>11</sup> of the experts were transcribed for further analysis.

During the third phase of data collection, we drew material from HireVue’s website to understand the corporate narrative and its promises made to the potential buyers of the technology but also, potential individuals who would undergo HireVue interviews (Borup et al., 2006). Additionally, we collected the very few interactions HireVue’s representative had with job applicants on Reddit<sup>12</sup>. The triangulation of collected materials such as online testimonies, counsel peddling and corporate narrative, which we will couple with already existing critical AI studies theory on the 21st century AI paradigm of machine learning and neural nets (Roberge & Castelle, 2021; Beer, 2023), sets the foundation of our analysis. While the controversial nature of Hirevue’s AHP is made apparent by the vast majority of posts we collected from Reddit,<sup>13</sup> we firmly believe that the best approach to explore this controversy does not lie in situational analytics (Marres, 2020) or computational methods but rather in a more traditional qualitative interpretative approach where the discourse registers would emerge as well as the entirely speculative nature of the information exchanged on the different forums.

#### 4. Case study: HireVue and its publics

The following section recapitulates our findings at a granular level.<sup>14</sup> This is where the principal data upon which our argument is built are explained. Large-scale technological deployment, shaky knowledge, one-sided interactions, alienation, disengagement, shared ruses, and various adaptation strategies, both corporate and individual, constitute the landscape which prompts the emergence of a symbolic and yet deeply political economic circuit. Through the testimonies left by actors enmeshed in controversial

<sup>10</sup> /Big4, /Boeing, /HireVue\_, /deloitte, /FinancialCareers, /recruiting.

<sup>11</sup> Saturation was rapidly reached with these contents as their messages were similar both in form and intent.

<sup>12</sup> Reddit: 4 posts.

<sup>13</sup> The unfavorable press coverage and the recent legislative action mentioned in the introduction of the article are also clear controversy markers. As Callon states, controversies, especially technological controversies, are negotiated both through scientific publications (the forum constituant) and through popular media (the forum officieux). Actors can occupy either or both of these positions and the interactions between the forum constituant and forum officieux help define the overarching narrative of the controversy (Callon, 2006). We thus hoped to bring together the discontent expressed on the r/recruitmentell subreddit with the sociological literature criticising the phenomenon of automated hiring platforms.

<sup>14</sup> In order to protect the anonymity of the commenters, we chose not to disclose their usernames. We also limited the quantity of quoted material to further protect their identity. All of the few quotes that were incorporated in this article have been tested with reverse search to make sure that it would prove difficult to trace them back to their original context. These measures have been taken in order to address issues about the ethical use of scraped Reddit data that were raised in recent literature (Adams, 2024).

relationships centered on HireVue's AHP distinctly appear the pressure-applying mechanics that shape said circuit.

#### **4.1 Key findings: HireVue's corporate communications**

##### **4.1.1 Scalability, seamlessness & speed**

HireVue presents its AHP as a universal tool that can be deployed in a wide variety of contexts. It can scale efficiently to tackle the needs of large scale or medium-size businesses. The AHP is also presented as a completely integrated solution that “makes the hiring process seamless.” One of the main selling points of the platform is the speed at which it will treat many job applications. According to the corporate website, “Hiring teams are facing a competitive market, and the first-to-offer has the first pick of talent.” (HireVue, 2023). In the context of a labor shortage crisis, this argument might be appealing to potential customers.

##### **4.1.2 Adaptation to critique**

Following the many critiques targeted at AHP, HireVue deployed a contrarian discourse where the AHP could be used to “support your diversity goals,” instead of being tagged as a discriminatory device. Also, following the change in regulations, lawsuits, and public outcry, HireVue dropped the AI-powered video analysis component from its platform.<sup>15</sup> A vague statement on the corporate websites states HireVue's wish, “to evolve as we work with our customers, jobseekers, technology partners, ethicists, legal advisors, and society at large.” Meanwhile, a class action was filed against HireVue on January 27<sup>th</sup> 2022 for multiple violations of the Illinois Biometric Information Privacy Act (Willner & Sabna, 2022).

##### **4.1.3 Short-lived engagement on public forums**

An official HireVue representative answered a total of four posts made by job applicants. Mention of “24/7 support team” able to answer email or phone calls was made. If, initially, support was offered,<sup>16</sup> it seems HireVue's PR representative has subsequently vanished from Reddit.

#### **4.2 Key findings: HR experts & counselors**

##### **4.2.1 AI or not?**

While HireVue claims to have eliminated the AI video analysis component of their platform, most HR experts capitalize on the fear created by such techniques. “I know it's a bit disturbing that there's an algorithm essentially analyzing you, but try not to think about it,” suggests one of these experts on YouTube. According to these specialists, AHPs can tell whether a candidate is nervous or not as well as confident or not. Eye contact, body language and intonation are mentioned as cues being analyzed during the interview. Moreso, the transcribed content of what an applicant said during an interview is compared to a list of desired keywords predetermined by the potential employer.

##### **4.2.2 Ignorant counselors**

It is very difficult to tell if any of the counselors offering advice about HireVue have any real, direct experience with the platform. Some explicitly expose they do not know how the AHP operates but since they have extensive experience as interview coaches, they should be knowledgeable. Most of the advice given out to eventual applicants is generic and claims about the AHP are entirely speculative.

<sup>15</sup> HireVue's CEO Kevin Parker claims that AI-powered video analysis “was adding some value to customers, but it wasn't worth the concern” (Knight, 2021, para. 5).

<sup>16</sup> “So if things go wrong in your interview, or if you need a webcam, tips and tricks, someone to talk to or anything like that, we are here,” wrote a HireVue representative.

#### 4.2.3 *Technical advice, mise-en-scène and behavioral adaptation*

The experts suggest investing in decent audiovisual equipment. A semi-pro microphone, camera and lighting kit should drastically improve the technical quality of the recording. It was also suggested to test the equipment prior to the interview. Many experts insist on being mindful of the surroundings and create a decent backdrop for the interview. Besides these counsels, applicants should spend time getting “more comfortable on camera” and train themselves. According to the experts, “watching yourself back and noting what you’re doing wrong” is part of the preparation for an AHP interview.

### 4.3 *Key findings: Job applicants’ forum posts*

#### 4.3.1 *What really is on the record (and why)?*

The commenters disagree whether the video is recorded continuously, even when the participant is not submitting a video answer to a question. A few applicants complained that the recorded videos could be kept forever. Some participants claim that they could be used by HireVue as training data for undisclosed ulterior motives. There is also a debate concerning whether the videos are viewed at all by human recruiters. Some commenters claim the videos are treated automatically and that the scores gained through game-like assessments are what really count.

#### 4.3.2 *Dehumanizing and dystopian*

Automated interviews are perceived by many commenters as disrespectful and dehumanizing. Some applicants claim that AHPs are in fact discriminatory and that HireVue “furthers the transition from workers people being just numbers [sic].” Even one participant claims that the system comes straight out of cyberpunk fiction.

#### 4.3.3 *One-sidedness*

HireVue, like many AHPs, uses an interview model where job applicants are left alone in front of their webcam. As they do not have counterparts to talk to, some commenters felt that they have undergone a disrespectful process that is not a “real” interview. The one-sidedness characterizing HireVue’s platform is deemed unfair by many participants since: “Interviewing is a two-way street and we candidates have just as much right to ask questions of them as they have a right to ask them of us.” Furthermore, a commenter voiced a concern many applicants have about this characteristic of AHPs: “The one-sidedness of it means that it inherently is bad for getting a good picture of a potential candidate.” According to many commenters, it appears to be very difficult to create a good impression in the absence of an interlocutor who could give direct feedback through verbal and non-verbal cues.

#### 4.3.4 *Lack of adaptation and effort*

Commenters who experienced HireVue’s AHP told forum members that some questions were being used cyclically from one interview to the other. Also, according to many applicants, some of the behavioral questions of the assessment are so generic they do not relate in any way to the job for which they made an application. Some interviews feature coding quizzes, which were deemed badly thought out by some applicants. A commenter who had previous experience as a recruiter even declared about the AHP: “This is one of those things that sound good in theory but I haven’t come across a company to use something like this for more than two years.” Another blamed the laziness of the recruiters who use these AHPs: “Recruiters don’t actually put any effort in, so the AI does all the work.”

#### 4.3.5 *Shared ruses: Technique, behavior and mise-en-scène*

Some participants provide technical hacks to unlock the interview questions from the web browser in advance. There even exists GitHub repositories that contain code to perform this type of exploit. Also, participants share tricks involving app minimization to “stall the timer.” Other suggestions by applicants involved changing the way one expresses themselves, “you gotta over exaggerate the way you explain

things,” and make sure to sound “super excited, super enthusiastic.” According to a commenter, the AI analysis part of HireVue’s AHP will favor “people with more clear-cut facial expressions.” Extensive discussions about clothing and more specifically, its specific color, could be found in many threads.

## 5. Data analysis

### 5.1 An ongoing controversy and job applicants’ online communities

Contradictions between corporate storytelling, scientific literature, and user experience characterize HireVue’s AHP. What is this technological platform exactly measuring? How are its AI components used and does it discriminate unfairly against specific groups of users? Online, such questions are the subjects of heated debates. The public discussion happening on Reddit pits the numerous negative comments posted by job applicants against the corporate claims of fairness and equity. This apparently face-to-face confrontation is complexified by the presence of seemingly independent agents, the so-called HR experts, who contribute to the public debate while trying to profit from the situation. While sorting the numerous posts we collected into broadly defined categories,<sup>17</sup> we noticed that the job applicants involved in the controversy could switch roles. For example, one-time job applicants seeking to learn more about the AHP could end up reposting on the same thread after their interview. The same could be said of commenters who could, at first, complain about the degrading nature of the AHP and, in the context of another post, provide directives to other applicants so they increase their chances of success on their next interview. Depending on their level of knowledge, based either on direct experiences of an AHP-conducted interview or on a basic understanding of the hiring process’s unwritten rules, these social actors can modify their status, gain some agency, and become counsel providers themselves. Inversely, they might roll back to being a commenter or, even, a knowledge seeker, if they experienced adverse results following an interview. These shifting roles amount to movements within an emerging circuit anchored on the AHP. The shared online bits of knowledge, even if they are mostly based on imagination since AHPs are highly black boxed,<sup>18</sup> highlights the existence of an informal support system that helps applicants to cope with a difficult situation. As Venturini wrote, “Controversies are the place where the most heterogeneous relationships are formed.” (2010, p. 261) A wide variety of actors from different backgrounds met online and created an exchange system organized around a technical object, HireVue’s AHP, where roles could switch depending on the amount of knowledge one has. By refusing to disseminate knowledge concerning the mode of operation of their AHP or to engage online with job applicants, HireVue<sup>19</sup> created a form of informational scarcity, which creates a power imbalance situated at the level of the job applicant and the machine.

<sup>17</sup> In order to get a grasp of the ongoing public debate, forum posts were tagged with the following properties: actors (HR Specialists, HireVue PR, Job Applicants, Onlookers), roles (Knowledge-seekers, Commenters [Specialized, Amateur or Experimented], Prescribers [Specialized, Amateur or Experimented]), expression register (critique, justification or adaptation) and then, types of critiques (HireVue Criticism, Socio-Economic Criticism, Alienation), types of adaptation (Behavior, Mise-en-scène, Technical ruse, Documentation) and types of justification (Socio-economic, Trickery, Automation, Corporate).

<sup>18</sup> The fact that HireVue rapidly stopped its online engagement with the community only worsened this situation.

<sup>19</sup> An additional argument based on HireVue’s website content could be made to support the existence of a deliberate corporate obfuscation strategy. Pretending to offer a custom-tailored hiring solution, the company claims are debunked by the confirmation that many interview questions are in fact recycled. Also, the website’s vague ethical declaration hinting in favor of cooperation with a wide variety of social actors is contradicted by the ongoing legal actions opposing the company to privacy advocacy and labour rights groups. The narrative deployed by the company contradicts factual evidence about its product and its effects.



## 5.2 Uneasy interviews: disrupted interactions and dysfunctional strategies

While some meta-analysis of reactions to AHPs present a balanced account, positive against negative, of job applicants' attitudes who submitted to such a process,<sup>20</sup> our findings indicate that most commenters on Reddit and YouTube are voicing negative opinions. Indeed, the one-sidedness of the AHP interview generates many criticisms. The traditional social form of the job-seeking process relied on the mediation of a technical object, the resumé, and of a human technique, the interview. By replacing the human recruiter with an AHP, HireVue claims it can now go beyond the resumé and “crack the technical hiring code.” (HireVue, 2019)

Through the concepts of face interaction, performance disruption and impression management, Goffman's microsociological framework of interactionism can help us understand further the distress of interviewees facing a faceless machine. The interaction ritual provides an interesting frame of reference to analyze job interviews since those are established form of interactions implying, “the standardization of bodily and vocal behavior.” (Goffman, 1983, p. 3) Like most social rituals, they are heavily codified and rely on conventions, establishing the “rules of the game.” If job interviews are understood as “people-processing encounters, encounters in which the ‘impression’ subjects make during the interaction affects their life chances,” and if “this processing is ubiquitous; everyone is a gatekeeper in regard to something,” then, what happens if said gatekeeper is faceless? (Goffman, 1983, p. 8) The one-sidedness characterizing AHP interviews breaks the traditional form of a long-established social ritual and creates gaps. The impossibility of a dialogue with a non-existent other, while having to perform as if there was an audience, pushes job applicants in an unknown territory: “The situation may cease to be defined, previous positions may become no longer tenable, and participants may find themselves without a charted course of action.” (Goffman, 1956, p. 155) More than a simple dysfunction, the one-sidedness of AHP interviews plays into the knowledge scarcity scheme already at work. Not only adding to the whole opaqueness of the AHPs black box, it also creates an asymmetric power relation where job applicants have to supply all the necessary visual and auditory cues to support their claim for work. This contradicts the very basic assumptions of an encounter<sup>21</sup>. As one of the applicants said on the forum, “It should go both ways.” AHPs create a situation where the other side is disembodied, acting like a negative presence, sucking in information, and providing none.

This last characteristic of AHP interviews inclines us to classify them into the regime of “synthetic situations” as described by Karin Knorr Cetina. Building on previous research conducted with globally (and algorithmically) connected financial traders,<sup>22</sup> the author identifies a new type of situation that imposes a reevaluation of the standard encounter described by Goffman. More than a simple “disorderly interactional arrangement struggling with problems of differential access, orientation and perspective, and coordination,” a synthetic situation “is a composite of information bits that may arise from many areas around the world and feature the most diverse and fragmented content.” (Cetina, 2009, p. 74, p. 69) One of the key features of these synthetic situations<sup>23</sup> is that their existence relies on scopic devices which

<sup>20</sup> See Hunkenschroer & Luetge, 2022, for example.

<sup>21</sup> The classical Goffmanian interaction starts with a bilateral information acquisition process: “When one enters the presence of others, he will want to discover the facts of the situation. Were he to possess this information, he could know, and make allowances for, what will come to happen [...] Full information of this order is rarely available; in its absence, the individual tends to employ substitutes—cues, tests, hints, expressive gestures, status symbols, etc.—as predictive devices.” (Goffman, 1956, p. 155)

<sup>22</sup> See Cetina, K. K. & Bruegger, U. (2002). Global Microstructures: The Virtual Societies of Financial Markets. *American Journal of Sociology*. 107(4). 905-950. <https://doi.org/10.1086/341045>.

<sup>23</sup> In line with Cetina's work, we consider our research endeavors to reside entirely in the realm of synthetic situations. The interviews as well as the comments on the platform or the knowledge exchanges implicating the self-proclaimed experts are to be understood as events making sense within a digital context without having to trace back these interactions to real-life incarnated population segments.

act as “instrument[s] for seeing or observing” (2009, p. 64). Beyond allowing the situation participants to coexist in remote locations, the scopic devices “make visible, project, and record things that cannot be seen in the physical situation or can be seen only in an informationally deprived manner—but that are causally implicated in the progress of the situation and its later outcomes.” (2009, p. 82) This definition fits the particulars of technology supporting the AHP, as the participants in such interviews provide not only their audiovisual answers to questions but also a trove of information collected during their course such as their behavior during the game assignments. The main difference between the traders observed by Cetina and the HireVue’s job applicants is that the latter’s experience is akin to a one-way mirror: the scopic device is looking at them, transferring algorithmic power to the eventual recruiters in an asynchronous and asymmetrical relation. In this case, the object to be gazed at and manipulated is not the market but the workers.

Building on the concept of fissures in algorithmic power—“moments in which algorithms do not govern as intended”—we can observe in this specific case that “algorithmic power enables and constrains social action, it entails domination and counteractions, and it is practiced—not possessed.” (Ferrari & Graham, 2021, p. 815, p. 818) While the job applicants seem to be stuck in some asymmetric power struggle with a faceless and ghastly opponent, they still provide an informal response through the forum and create a social network dedicated to the matter. However, the cumulation of job applicants’ attitude toward the AHP opaqueness (even if it is sometimes rooted in ruse), and the trauma caused by one-sided interviews, do not actuate in an organized political response in the name of workers’ rights. If “platforms bring reshaped modes of social contestation into being,” (Ferrari & Graham, 2021, p. 827) they do not aim for revolution or organize aggression against the deployment of AHPs. The protestations expressed on the forum, while showing some level of solidarity, fuels an individualistic market-like attitude where one can beat the game.

## 6. The political economy of machinic mythmaking: Nonknowledge and agency

To understand the way that HireVue’s AHP modulates individuals’ lives through both behavioral modification and material conditions in the form of access to a job, we turned to the sociological tradition of political economy<sup>24</sup>. Precisely, we aim to demonstrate that when in the presence of uncertainties, individuals try to mobilize equivalent certainties to acquire agency in the face of the unknown. We thus draw on the work of sociologist David Beer (2023) to understand how the opacity of AI acts not as a shroud, but as an engine for new forms of sociality based on the way individuals represent themselves the prehension of HireVue’s AI on their practices. We argue that AI technologies exist in their own state of exception, allowing them to set the boundaries of knowledge about them and conversely, of what is unknown about them as well (Rappin, 2018; Beer, 2023; Farrell & Fourcade, 2023). It is this generation of “nonknowledge” that prompts a circuit of political economy around the black box. Individuals become actors in the circuit, taking on different roles depending on their accumulated knowledge and experience of HireVue, grasping to gain agency in front of the machine.

Beer draws heavily from the work of philosopher George Bataille to further his understanding of neural networks<sup>25</sup> as these different machines are unified by the core logic of conscripting and operationalizing

<sup>24</sup> While the approaches in political economy are connoted and largely of Marxist descent (Marx, 1968), they nonetheless remain multiple in their choice of objects and methods. Even if researchers who mobilize political economy tend to work on macro-economic objects and systems (Fourcade & al., 2023), we assert, by drawing heavily on the work of philosopher George Bataille (1967; 2011), that political economy exists in the realm of culture, symbols, knowledge, and other abstract currencies as well as on a micro level, situated in interactions between actors and/or technical objects. The circulation of currency flux is what generates new forms of sociality, no matter the currency and actors in the hands of which it circulates.

<sup>25</sup> As Roberge and Castelle argue (2021), the current landscape of artificial intelligence is dominated by technologies emerging from the neo-connectionist tradition (Hinton, Bengio & LeCun) such as neural network, trained using a whole variety of

the unknown as well as the inexplicability of the chains of operations that leads to outputs (Lepage-Richer, 2021; Beer, 2023). This opacity leads Beer to claim that “nonknowledge is not a by-product so much as it is a central and defining aim. They [neural networks] run on nonknowledge and are intended to reside beyond the explainable. Indeed, the aim is to be unexplainable. The presence of nonknowledge even seems to promote a sense of authenticity of the system” (Beer, 2023, p. 110) as it entertains the spectacle of automation and machinic sentience. But what is nonknowledge? Beer sums it in the following way:

Knowledge only exists where it is created and that there are fields outside this to which there is no knowledge—there are important unknowables. [...] What Bataille seems to be identifying here is how, because of a sense of unease or imbalance, we know when we are moving into the domain of nonknowledge. Nonknowledge creates uneasiness, he is arguing, because it is a space in which we cannot be certain or sure, we sometimes become aware of that uncertainty. (Beer, 2023, p. 101)

Knowledge is created by human activity, whether scientific, philosophic, or artistic, while nonknowledge exists beyond the limits of human creation. Beer insists on this relationship between knowledge, which is deemed “stable” when acquired, and nonknowledge, which is deemed “unstable” and “uneasy,” as it exists independently of humans and cannot be acquired. Both co-exist and influence individuals who circulate between their frontiers; “nonknowledge does not need to be turned into knowledge in order for it then to be part of a system.” (Beer, 2023, p. 105) While this independence of nonknowledge from humans can be attractive as it entails new possibilities, it is still predominantly associated by Beer with a feeling of *malaise* as *uneasiness in front of the AHP* is something majorly reported in the research data. As neural networks are trained through machine learning, they require the production of “nonknowable” spaces from where they artificially “learn” and organize the creation of automated knowledge to, as Beer puts it, fill the gaps. “There is an aspiration for nonknowledge and a desire to use nonknowledge as a productive presence.” (Beer, 2023, p. 10) Productive nonknowledge translates in many ways. For example, the securitization of AIs from adversity by way of corporate secrecy feeds into the nonknowledge barrier prompted by the black box (Burrell, 2016). Productive nonknowledge, in the form of information scarcity, generates an environment where user interaction becomes beta-testing fuel for the machines that train themselves recursively on said interactions (Amoore, 2022; Beer, 2022, 2023). By accepting this idea that the opacity of AI sets the boundaries of knowledge and nonknowledge in which users operate and interact with machines, we fully embrace the idea that opacity, or the black box, is *generative*: symbolically (as AI becomes a site of cultural production), socially (as AI stimulates the emergence of new forms of social behaviors), economically (as AI allows for the emergence of new currencies and ways to circulate them) and politically (as AI intervenes and frames negotiations taking place between actors engaged in political relations).

What, then, is the political economy of HireVue’s AHP? Looking back at the data points, we assert the existence of a symbolic political economy circuit anchored on the AHP, where knowledge or, as we will see further, myths, are produced and circulated among actors who, in return, gain or lose value in the face of one another, reconfiguring their social positions around the machine. Indeed, as HireVue operates in its own state of exception, it consequently generates its own chain of value. As we demonstrated in the case study, this chain of value and its associated productions are guided by the existence of nonknowledge prompted by information scarcity, as individuals clearly report their sense of unease, even psychological or emotional distress, while anticipating an automated interview or after having passed one. But even individuals who consider HireVue positively still operate in the confines of nonknowledge; the baseline fact remains that no matter the outcome of the interview, whether a job is given or not, the *interior* of HireVue’s AI remains *unexplainable* and thus, *unknowable*. As Beer puts it, drilling down on the inevitable and generative power of AI’s nonknowledge, “algorithmic systems produce new unknown and

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techniques associated with machine learning and backpropagation feedback loop (Cardon & al., 2018). When we refer to AI in this article, we thus refer to these kinds of technologies rather than the expert systems promoted by the symbolist tradition of AI researchers.

can even be built around the pursuit of increasing unexplainability. Expanding the learning of automated systems requires the making of mysteries.” (Beer, 2023, p. 122) Mysteries justify the creation of myths, and that is what is being traded around HireVue since the counsels, or even some critiques (such as the idea that the company uses the recorded videos and voices for subsequent model training) are at least partially flawed.

We insist on the term “partially” as these different utterances are still produced to fill the knowledge gap prompted by HireVue and are based on previous knowledge of the interactionist framework of job interviews. These are attempts at creating an equivalence to acquire agency, and the abstraction of these enunciations, whether advice or critique, acts as a currency depending on the projected value of the assertion (good advice or good critique vs. bad advice or bad critique). Agency here is conceptualized as the merchandise that actors try to acquire, as it is exactly their claims to having some form of agency in front of HireVue that gives them legitimacy as either prescriptors, commenters or critics and, by extension, that gives value to their utterances about the AHP. Currency, as it is imagined as an equivalence to all things in the representation of value, can thus turn immaterial things that were not merchandise in merchandise, such as “honor and conscience” (Marx, 1968, p. 189). Still, we must pay attention to the fundamental aspects of the currency used in agency acquisition. As previously mentioned, the fact that HireVue’s technology is paraded as AI<sup>26</sup>, and that we are witnessing a moment in which what is presented as AI operates on opaque neural network technologies, we can assert that almost any claims we’ve encountered online about the technology at work are baseless. Yet, individuals testify all the same, or have followed recommendations found online, which means that they fundamentally believed that some claims do have value while others are worthless.

Neural networks are mystery generators, and humans, when confronted with unexplainable phenomena, tend to produce myths as attempts to fabricate explanations as they are in a state of “lackness” (Bataille, 1967; 2011). Knowledge can then be gained from the study of myths until a new regime of knowledge such as science suggests other explanations. To recapitulate: HireVue’s AI system creates a space of nonknowledge which makes individuals feel uneasy in an interview scenario. Individuals start taking roles as actors online, circulating advice and critics based on previously “knowns”. Such utterances become treated as a currency potentially convertible into agency within the circulatory system structured by gatekeeping AHPs. The very fundamentals of neural networks technology neutralize any potential generalization of outcomes, rendering the creation of stable knowledge impossible. Actors thus remain in the borders of unstable nonknowledge, meaning that the creation of value from the forum posts never gain full legitimacy. Since AI systems operate in pure opacity, they act as myth machines. Individuals who adapt their conduct to the hypothetical needs of the AI, such as in the HireVue case, do so by according credibility to myths. AI’s political economy is thus one of mythmaking.

## 7. Conclusion

As we are writing the last words of this article, circa October 2023, multiple firms that used HireVue’s AHP in various employee screening processes either lost a lawsuit or are still facing judicial pursuit.<sup>27</sup> As jurisprudence is building up against AHPs, some state officials voice their mistrust about these systems

<sup>26</sup> While acquiring information on HireVue’s website about what tasks are operated by AI proved difficult, we did find the following description of the platform’s AI on data-driven marketing firm TechTarget’s website: “Along with voice recognition and facial recognition software, HireVue uses a software ranking algorithm to determine which candidates are ideal for a specific job. An ideal candidate is defined by a combination of traits including body language, tone, and keywords. The interview data is then compared to approximately four million video interviews of top candidates in that specific role.” (TechTarget, 2019, paragr. 5)

<sup>27</sup> In 2022, former Estée Lauder Companies UK & Ireland employees received an out of court settlement to terminate a lawsuit filed after getting sacked following an algorithmic evaluation powered by HireVue’s AHP (Personnel Today, 2022). A class-action lawsuit was filed in 2023 in Massachusetts against CVS Health since the company screened applicants with HireVue’s AHP, which could violate the state law restricting the use of lie detectors (Dunn, 2023).

going as far as claiming they can unfairly discriminate against people with disabilities (Clarke, 2021). Kristen Clarke, US Assistant Attorney General for Civil Rights, voiced her concerns during a news conference held jointly in 2021 by the U.S. Justice Department and the Equal Employment Opportunity Commission. Mentioning “reports of increased use of AI by employers to solicit job candidates and screen applicants,” (2021, para. 10) the Assistant Attorney General warned potential employers about the risks of using AHPs as these systems could put them in contravention of the law. As the US federal government analyzes “developments in case law pertaining to AI and civil rights,” (2021, para. 16) some members of the HR community are considering risks involved in using AHPs. Since litigation targets the user of such systems rather than the manufacturer, some HR specialists prefer to keep from using them and risk a lawsuit as “they can’t assume a vendor will ‘have your back in a worst-case scenario.’” (Thibodeau, 2023, para. 23) Nonetheless, HireVue’s AHP is still widely used, and tension builds as more and more job applicants are confronted to one-sided, discriminatory interviews that are shrouded in opaqueness.

While this ongoing controversy will generate additional lawsuits soon, one might wonder what is truly at stake since these increasingly criticized AHPs are still generating interest amongst a part of the human resources community. In its published *Explainability Statement*, HireVue mentions to have “hosted more than 26 million video interviews and 5 million AI-based candidate assessments for over 700 customers around the globe.” (HireVue, 2022, p. 1) This data hoard consisting of psychographic information linked to individual personal data might explain in part the sustained interest for such systems. “Based on data from thousands of real-life interviews, covering a diverse range of interviewees and job types and the scoring,” (HireVue, 2022, p. 8) HireVue’s Behaviorally Anchored Rating Scale system necessitates ongoing data extraction from automated interviews to train the AI component that will judge job applicants. The trove of intimate knowledge concerning interviewees casts a shadow proportional to its size. It is in this dimly lit area of nonknowledge that thrives the emergent symbolic political economic circuit acting as a myth-making machine.

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